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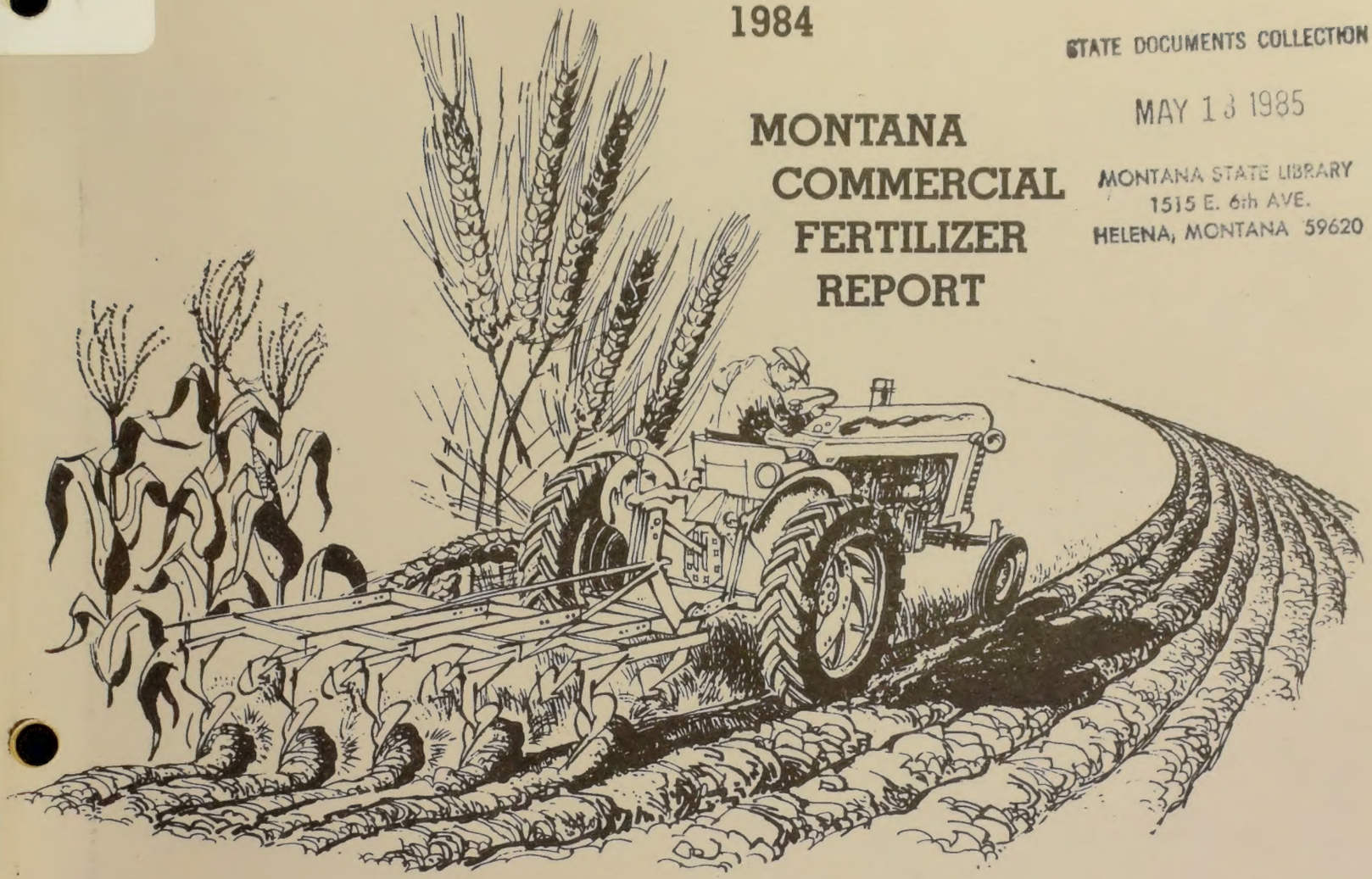
MONTANA COMMERCIAL FERTILIZER REPORT



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MONTANA DEPARTMENT OF AGRICULTURE

Plant Industry Division

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This report consists of the following sections:

Commercial.....Pages 1-15

Specialty.....Pages 15-18

Statistical.....Pages 19-22

Abbreviations used:

P_2O_5....available phosphoric acid

K_2.....soluble potash

C.....claimed

F.....found

ppm.....parts per million

*.....deficiency

COMMERCIAL FERTILIZER ANALYSIS

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN		P_2O_5		K_2O		MICRONUTRIENT		
				C	F	C	F	C	F		C	F
AGRI-BASICS COMPANY Box 112 Belgrade, MT 59714												
25-10-0	Belgrade	1026	bulk	25	23.4*	10	11.6	0		Sulfur	7	8.5
25-0-16	Belgrade	1027	bulk	25	27.5	0		16	12.9*			
AGRI-BASICS COMPANY Box 774 Lewistown, MT 59457												
Blend/12.8-25.6-12.8-6.4	Lewistown	1203	bulk	12.8	13.7	25.6	22.3*	12.8	10.6*	Sulfur	6.4	10.2
28-25-8	Lewistown	1209	bulk	28	24.0*	25	23.7*	8	9.8			
AGRI-BASICS COMPANY Box 551 Sidney, MT 59270												
9-30-0/Blend	Sidney	439	bulk	9	8.8	30	28.9*					
20-4-10/Blend	Sidney	438	bulk	20	19.3	4	4.6	10	9.9			
AGRI-BASICS COMPANY Wolf Point, MT 59201												
Blend/25-25-0	Wolf Point	434	bulk	25	25.5	25	23.8*					
Blend/10-40.7-8.1-1.9	Wolf Point	435	bulk	10	9.9	40.7	39.7*	8.1	9.0	Sulfur	1.9	3.2
										Zinc	1.35	0.59*
Blend/15.4-9.2-12.3-7.6	Wolf Point	436	bulk	15.4	15.6	9.2	13.1	12.3	14.6	Sulfur	7.6	8.6
										Zinc	3.1	0.50
Agri Basics Box 112 Belgrade, MT 59714												
26.5-0-13.2	Belgrade	1035	bulk	26.5	20.0*			13.2	24.8			
13-40-0	Belgrade	1039	bulk	13	12.9	40	37.1*			Sulfur	7	8.0
Agri-Basics Company Box 2548 Great Falls, MT 59403												
34-0-0	Great Falls	1222	bulk	34	34.4							
34-0-0	Miles City	1416	bulk	34	34.4							
0-0-60	Miles City	1417	bulk					60	63.2			
18-46-0	Miles City	1418	bulk	18	17.9	46	45.9					
0-45-0	Miles City	1419	bulk			45	44.9					

COMMERCIAL FERTILIZER ANALYSIS

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN		P_2O_5		K_2O		MICRONUTRIENT		
				C	F	C	F	C	F		C	F
Agri-Basics Company Box "B" Moore, MT 59464												
27.5-0-0	Moore	1205	bulk	27.5	30.5					Sulfur	12	7*
Blend/10.4-41.7-10.4	Moore	1206	bulk	10.4	11.3	41.7	44.1	10.4	6.7*			
27.5-0-0	Harlowton	1382	bulk	27.5	30.6					Sulfur	12	7.6*
Agri-Basics Company Wolf Point, MT 59201												
Blend/14.3-37.5-9.1	Glendive	1451	bulk	14.3	12.8*	37.5	38.3	9.1	10.6			
Beartooth Feed & Grain Box 1088 Red Lodge, MT 59068												
Blend/24-9.2-12	Red Lodge	2002	bulk	24	28.0	9.2	7.1*	12	7.2*			
Blend/9-43.4-11.3	Red Lodge	2003	bulk	9	7.7*	43.4	37.6*	11.3	17.3			
34-0-0	Red Lodge	2025	bulk	34	34.3							
Beker Ind. Corp. Box 5700, 124 W. Putnam Ave. Greenwich, CT 06830												
Becker/16-20-0	Three Forks	410	bulk	16	15.6	20	22.6					
16-20-0	Three Forks	1016	bulk	16	15.9	20	20.3					
11-53-0	Dillon	1028	bulk	11	10.6	53	52.4			Sulfur	2	1.6
11-53-0	Three Forks	1029	bulk	11	10.9	53	51.8*					
11-53-0	Belgrade	1032	bulk	11	10.9	53	53.5					
18-46-0	Billings	1213	bulk	18	17.8	46	46.7					
11-53-0	Great Falls	1221	bulk	11	11.1	53	51.3*					
18-46-0	Fairfield	1223	bulk	18	17.5	46	45.9					
11-53-0	Shelby	1244	bulk	11	11.1	53	52.9					
18-46-0	Shelby	1241	bulk	18	17.0*	46	46.2					
11-53-0	Havre	1273	bulk	11	10.8	53	53.1					
11-53-0	Great Falls	1284	bulk	11	11.0	53	52.8					
16-20-0-14	Fort Benton	1285	bulk	16	14.9*	20	18.7*			Sulfur	14	15.8
11-53-0	Fort Benton	1286	bulk	11	9.2*	53	50.5*					
11-53-0	Carter	1289	bulk	11	10.7	53	51.5*					
18-46-0	Fairfield	1297	bulk	18	17.8	46	47.1					
11-53-0	Fairfield	1298	bulk	11	11.0	53	53.4					
18-46-0	Power	1299	bulk	18	17.5	46	46.9					
11-5-0	Power	1300	bulk	11	10.9	53	53.2					
11-53-0	Conrad	1302	bulk	11	11.1	53	51.5*					

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
16-20-0	Brady	1303	bulk	16	16.1	20	21.4					
11-53-0	Brady	1304	bulk	11	11.1	53	53.7					
18-46-0	Conrad	1307	bulk	18	17.4	46	47.0					
16-20-0	Conrad	1308	bulk	16	15.7	20	21.9					
16-20-0	Conrad	1321	bulk	16	15.9	20	20.9					
11-53-0	Conrad	1322	bulk	11	10.9	53	52.1					
11-53-0	Great Falls	1325	bulk	11	10.9	53	53.3					
18-46-0	Great Falls	1326	bulk	18	17.1*	46	46.2					
18-46-0	Baker	1421	bulk	18	17.6	46	45.9					
11-53-0	Wolf Point	1443	bulk	11	11.0	53	52.8					
18-46-0	Glendive	1449	bulk	18	17.6	46	46.5					
11-53-0	Glendive	1450	bulk	11	11.0	53	52.9					
11-53-0	Reserve	1455	bulk	11	11.1	53	53.4					
18-46-0	Belgrade	1667	bulk	18	17.9	46	49.1					
11-53-0	Belgrade	1668	bulk	11	10.9	53	55.5					
16-20	Belgrade	1669	bulk	16	15.3	20	24.0			Sulfur	14	14.8
11-53-0	Broadview	2004	bulk	11	10.8	53	53.1					
18-46-0	Billings	2009	bulk	18	17.2*	46	46.3					
18-46-0	Billings	2017	bulk	18	17.0*	46	46.1					
11-53-0	Billings	2018	bulk	11	10.7	53	51.9*					
16-20-0	Billings	2019	bulk	16	15.6	20	20.2					
18-46-0	Red Lodge	2023	bulk	18	17.4	46	45.4					
18-46-0	Lewistown	2038	bulk	18	14.1*	46	47.6					
11-53-0	Lewistown	2039	bulk	11	10.9	53	52.3					
11-53-0	Stanford	2043	bulk	11	10.9	53	52.6					
11-53-0	Stanford	2047	bulk	11	10.9	53	52.8					
11-53-0	Billings	2054	bulk	11	10.7	53	54.1					
18-46-0	Billings	2055	bulk	18	17.8	46	47.8					
16-20-0-14	Billings	2057	bulk	16	15.9	20	21.1			Sulfur	14	18.8
11-53-0	Columbus	2080	bulk	11	11.2	53	53.1					
18-46-0	Columbus	2082	bulk	18	17.9	46	49.1					
16-20-0-14S	Ryegate	2087	bulk	16	15.2*	20	23.5			Sulfur	14	14.7
18-46-0	Bridger	2088	bulk	18	17.4	46	47.8					
Bi-state Coop Box 1071 Savage, MT 59262												
Blend/23.6-18.1-7.3	Savage	445	bulk	23.6	24.6	18.1	19.4	7.3	5.1*			
Blend/29-14.6-0	Sidney	1438	bulk	29	29.0	14.6	14.7					
18-46-0	Sidney	1454	bulk	18	11.1*	46	52.4					

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	 F	P_2O_5 C	 F	K_2O C	 F	MICRONUTRIENT	C	F
Cargill, Inc. Box 9300 Minneapolis, MN 55440												
12-28-5-8.....	Harlowton	502	bulk	12	12.8	28	29.5	5	5.8	Sulfur	8	8.8
19-25-5.....	Harlowton	1202	bulk	19	18.1*	25	24.9	5	8.2			
27.6-14.3-0.....	Lewistown	1204	bulk	27.6	28.1	14.3	12.2*					
11-52-0.....	Belgrade	413	bulk	11	11.5	52	54.5					
11-56-0.....	Belgrade	415	bulk	18	18.0	46	49.4					
18-46-0.....	Glasgow	433	bulk	18	18.2	46	46.4					
18-46-0.....	Chester	1247	bulk	18	18.0	46	46.1					
11-52-0.....	Chester	1248	bulk	11	11.4	52	51.8					
0-0-60.....	Lewistown	2050	bulk					60	61.8			
46-0-0.....	Lewistown	2051	bulk	46	46.4							
11-52-0.....	Joplin	1253	bulk	11	11.3	52	51.8					
18-46-0.....	Joplin	1254	bulk	18	18.0	46	45.9					
18-46-0.....	Havre	1276	bulk	18	18.2	46	45.9					
11-52-0.....	Havre	1275	bulk	11	11.5	52	52.4					
11-52-0.....	Fort Benton	1288	bulk	11	11.5	52	52.2					
11-52-0.....	Glendive	1439	bulk	11	11.4	52	52.0					
11-52-0.....	Lewistown	2052	bulk	11	11.5	52	52.5					
Chevron Chemical Comp. 940 Hensley Street Richmond, CA 94804-0036												
Ortho/34-0-0.....	Three Forks	1030	bulk	34.0	34.1							
34-0-0.....	Great Falls	1230	bulk	34	34.3							
32-0-0.....	Conrad	1238	bulk	32	31.2							
32-0-0.....	Great Falls	1283	bulk	32	30.1*							
32-0-0.....	Conrad	1315	bulk	32	31.9							
Orth/16-16-16.....	Stevensville	1355	bulk	16	15.5	16	16.1	16	16.2	Sulfur	2.7	2.8
Ortho/34-0-0.....	Hamilton	1358	bulk	34	34.1							
Ortho/5-10-10.....	Stevensville	1361	bulk	5	5.4	10	10.4	10	11.0	Calcium	4.5	9.8
										Magnesium	2.0	4.9
										Iron	0.2	0.9
Unipel/27-12-0.....	Stevensville	1363	bulk	27	26.7	12	12.4			Sulfur	5	4.6
34-0-0.....	Stevensville	1366	bulk	34	34							
Ortho/34-0-0.....	Kalispell	1607	bulk	34	34.1							
Ortho/34-0-0.....	Kalispell	1647	bulk	34	34.3							
Ortho/34-0-0.....	Three Forks	1674	bulk	34	34.4							

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
34-0-0.....	Billings	2008	bulk	34	34.4							
Ortho/34-0-0.....	Billings	2016	bulk	34	34.6							
Cominco American P.O. Box 3087 Spokane, WA 99220												
Elephant/0-0-60.....	Kalispell	044						60	61.2			
0-0-60.....	Ronan	423						60	61.7			
21-0-0.....	Three Forks	1031	bulk	21	20.9							
Elephant/0-0-60.....	Great Falls	1199	bulk					60	63.4			
21-0-0.....	Great Falls	1200	bulk	21	21.1							
0-0-60.....	Shelby	1240	bulk					60	60.1			
11-55-0.....	Shelby	1242	bulk	11	11.1	55	55.3					
16-20-0.....	Shelby	1245	bulk	16	16.4	20	20.5					
Elephant/46-0-0.....	Chester	1246	bulk	46	46.4							
Elephant/0-0-60.....	Chester	1249	bulk					60	60.4			
36-0-0-20.....	Joplin	1255	bulk	36	36.1					Sulfur	20	21.3
Elephant/0-0-60.....	Joplin	1256	bulk					60	60.7			
46-0-0.....	Joplin	1257	bulk	46	46.3							
11-55-0.....	Kremlin	1274	bulk	11	11.1	55	54.7					
11-55-0.....	Geraldine	1292	bulk	11	11.8	55	54.1*					
11-55-0.....	Conrad	1313	bulk	11	11.3	55	55.6					
11-55-0.....	Conrad	1319	bulk	11	11.3	55	56.4					
46-0-0.....	Conrad	1320	bulk	46	46.2							
21-0-0-24.....	Great Falls	1327	bulk	21	21.0					Sulfur	24	24.7
Elephant/16-20-0.....	Hamilton	1356	bulk	16	16.6	20	21.4					
Elephant/11-55-0.....	Hamilton	1357	bulk	11	11.3	55	55.2					
Elephant/0-0-60.....	Hamilton	1359	bulk					60	61.1			
11-55-0.....	Culbertson	1434	bulk	11	11.1	55	55.0					
Elephant/46-0-0.....	Culbertson	1435	bulk	46	46.5							
Elephant/0-0-60.....	Kalispell	1644	bulk					60	61.4			
Elephant/16-20-0.....	Kalispell	1645	bulk	16	16.6	20	21.6					
Elephant/11-55-0.....	Kalispell	1646	bulk	11	11.3	55	56.6					
Elephant/21-0-0.....	Moise	1654	bulk	21	21.0							
Elephant/0-0-60.....	Ronan	1656	bulk					60	61.3			
Elephant 21-0-0-24.....	Belgrade	1671	bulk	21	21.1					Sulfur	24	24.6
Elephant/21-0-0.....	Lewistown	2040	bulk	21	21.1							
Elephant/21-0-0.....	Stanford	2041	bulk	21	24.0							
Elephant/34-0-0-20.....	Stanford	2042	bulk	34	36.5					Sulfur	20	19.8
Elephant/0-0-60.....	Stanford	2044	bulk					60	60.7			
Elephant/11-55-0.....	Stanford	2045	bulk	11	11.4	55	55.5					

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
Elephant/0-0-60.....	Billings	2059	bulk					60	60.9			
Elephant/46-0-0.....	Harlowton											
Elephant/0-0-60.....	Harlowton	2084	bulk					60	61.1			
Conklin Manufacturing Co., Inc. 4660 West 77th Street Minneapolis, MN 55435												
9-18-9.....	Glendive	446	bulk	9	9.3	18	18.4	9	9.4			
16-4-4.....	Glendive	447	bulk	16	20.0	4	4.8	4	5.3			
Culbertson Supply Box 625 Culbertson, MT 59218												
28.5-27.5-0.....	Culbertson	1432	bulk	28.5	29.2	27.5	28.4					
18-44-0.....	Culbertson	1433	bulk	18	17.9	44	44.8					
Dillon Fertilizer Co. 417 N. Montana Street Dillon, MT 59725												
Blend/3-Wy Special/												
28.4-12.4-2.9.....	Dillon	1038	bulk	28.4	28.6	12.4	12.2			Sulfur	2.9	2.8
Blend/29-16-0.....	Dillon	1384	bulk	29	28.8	16	12.3*					
Blend/28.4-12.4-0-2.9.....	Dillon	1385	bulk	28.4	23.1*	12.4	14.4	0		Sulfur	2.9	2.9
Exxon Chemical Americas Box 3272 Houston, TX 77001												
Engro/34-0-0.....	Belgrade	411	bulk	34	34.4							
Engro/34-0-0.....	Fairfield	1224	bulk	34	34.6							
46-0-0.....	Shelby	1243	bulk	46	46.2							
46-0-0.....	Reserve	1431	bulk	46	46.2							
Engro/34-0-0.....	Hardin	2035	bulk	34	34.4							
Engro/34-0-0.....	Lewistown	2037	bulk	46	46.4							
Engro/34-0-0.....	Stanford	2048	bulk	34	34.3							
Engro/18-46-0.....	Stanford	2049	bulk	18	17.8	46	46.7					
Engro/34-0-0.....	Billings	2056	bulk	34	34.4							
Engro/34-0-0.....	Bridger	2089	bulk	34	34.6							

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	 F	P_2O_5 C	 F	K_2O C	 F	MICRONUTRIENT	 C	 F
Farmland Ind. Inc. 3315 N. Dakota Trafficway Kansas City, MO 64116												
11-52-0	Homestead	1456	bulk	11	11.3	52	52.8					
Farmers Union Assn. Box 385 Hardin, MT 59034												
Blend/30.5-25.5-0	Hardin	1217	bulk	30.5	30.0	25.5	25.4					
Farmers Union Carriers Scobey, MT 59263												
Blend/23.8-36.5-0	Scobey	1430	bulk	23.8	22.7*	36.5	37.3					
Farmers Union Central Exchange Box 43089 St. Paul, MN 55164												
16-20-0-14	Kalispell	15	bulk	16	15.8	20	21.2			Sulfur	14	15.0
46-0-0	Billings	1214	bulk	46	45.8							
11-52-0	Fairfield	1227	bulk	11	11.0	52	51.1					
18-46-0	Fairfield	1228	bulk	18	17.9	46	46.6					
0-0-60	Conrad	1234	bulk					60	65.6			
11-53-0	Conrad	1235	bulk	11	11.1	53	52.2	0				
11-51-0	Conrad	1236	bulk	11	10.8	51	51.4	0				
10-34-0	Conrad	1237	bulk	10	9.9	34	34.2	0				
46-0-0	Chester	1250	bulk	46	45.9	0		0				
11-51-0	Chester	1251	bulk	11	10.9	51	51.2					
21-0-0-24	Rudyard	1259	bulk	21	21.0	0		0		Sulfur	24	24.6
16-20-0-14	Rudyard	1258	bulk	16	22.0	20	17.0*			Sulfur	14	12.4*
0-0-60	Rudyard	1260	bulk					60	60.2			
11-51-0	Rudyard	1261	bulk	11	11.1	51	51.9					
46-0-0	Rudyard	1262	bulk	46	46.3	0		0				
11-52-0	Havre	1278	bulk	11	11.1	52	52.4					
18-46-0	Havre	1279	bulk	18	17.6	46	46.5					
16-20-0	Havre	1280	bulk	16	15.8	20	21.3					
11-52-0	Geraldine	1296	bulk	11	11.1	52	51.7					
11-53-0	Dutton	1301	bulk	11	11.1	53	53.4					
34-0-0	Brady	1306	bulk	34	34.6							
0-0-61	Brady	1305	bulk					61	62.6			
46-0-0	Conrad	1309	bulk	46	46.4							
11-52-0	Stevensville	1350	bulk	11	11.0	52	52.4					

COMMERCIAL FERTILIZER ANALYSIS

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
18-46-0	Stevensville	1351	bulk	18	17.7	46	46.1					
0-44-0	Stevensville	1352	bulk			44	44.1					
0-0-60	Stevensville	1364	bulk					60	62.3			
34-0-0	Stevensville	1388	bulk	34	34.2							
16-20-0	Stevensville	1389	bulk	16	16.1	20	22.0					
0-0-60	Baker	1420	bulk					60	61.9			
46-0-0	Baker	1422	bulk	46	46.3							
21-0-0	Glasgow	1423	bulk	21	21.0							
31-24-0	Baker	1437	bulk	31	32.1	24	22.7*					
18-46-0	Wolf Point	1444	bulk	18	17.9	46	46.5					
46-0-0	Wolf Point	1445	bulk	46	46.2							
40-0-0	Baker	1447	bulk	46	46.4							
18-46-0	Baker	1446	bulk	18	17.9	46	46.6					
18-46-0	Baker	1448	bulk	18	17.8	46	46.3					
34-0-0	Savage	1453	bulk	34	34.3							
18-46-0	Savage	1452	bulk	18	18.4	46	46.5					
11-53-0	Fairview	1457	bulk	11	11.0	53	54.8					
21-0-0	Ronan	1609	bulk	21	21.1							
0-44-0	Ronan	1610	bulk			44	44.5					
Blend/4-19-36	Kalispell	1648	bulk	4	4.2	19	20.8	36	36.2			
34-0-0	Kalispell	1650	bulk	34	34.5							
16-20-0	Kalispell	1651	bulk	16	16.1	20	21.7			Sulfur	14	14.2
0-0-60	Kalisepll	1652	bulk					60	62.4			
46-0-0	Moise	1658	bulk	46	46.2							
34-0-0	Townsend	1672	bulk	34	34.2							
16-20-0-14	Townsend	1673	bulk	16	16.3	20	20.4			Sulfur	14	15.8
46-0-0	Broadview	2005	bulk	46	46.3							
46-0-0	Worden	2027	bulk	46	46.2							
0-44-0	Hardin	2028	bulk			44	44.3					
11-52-0	Hardin	2029	bulk	11	11.3	52	52.5					
18-46-0	Hardin	2030	bulk	18	18.0	46	46.1					
46-0-0	Hardin	2031	bulk	46	46.1							
0-0-60	Hardin	2032	bulk					60	60.6			
46-0-0	Billings	2076	bulk	46	46.0							
11-52-0	Billings	2077	bulk	11	11.2	52	53.8					
34-0-0	Edgar	2091	bulk	34	34.4							
0-0-60	Edgar	2093	bulk					60	62.2			
11-52-0	Edgar	2092	bulk	11	11.1	52	53.9					
18-46-0	Edgar	2094	bulk	18	17.9	46	48.3					
18-46-0	Edgar	2095	bulk	18	17.9	46	48.3					

COMMERCIAL FERTILIZER ANALYSIS

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN		P_2O_5		K_2O		MICRONUTRIENT		
				C	F	C	F	C	F		C	F
30-12-12	Glasgow	1424	bulk	30	29.5	12	13.1	12	12.6			
35-18-0	Baker	1436	bulk	35	32.4*	18	19.7					
Farmers Union Oil Circle, MT 59215 Blend/14-36-13	Circle	450	bulk	14	14.2	36	34.0*	13	12.3			
Farmers Union Oil Box 995 Wolf Point, MT 59201 Blend/28-28-0	Wolf Point	1425	bulk	28	28.0	28	28.6					
Farmers Union Oil Co. Worden, MT 59088 Blend/38.2-12.75-0	Worden	2001	bulk	38.2	37.6	12.75	14.3					
Full Circle, Inc. Miles City, MT 59301 Blend/29.6-11.9-11.9	Miles City	437	bulk	29.6	29.2	11.9	12.9	11.9	11.8			
Gallatin Farmers Box 129 Belgrade, MT 59714												
Blend/12.8-16-12-11.2	Belgrade	1033	bulk	12.8	13.4	16	17.8	12	10.7*	Sulfur	11.2	12.2
Blend/39.6-10.4	Belgrade	1034	bulk	39.6	40.0	10.4	9.8					
Blend/15.1-19.2-0.9-8.7	Belgrade	1040	bulk	15.1	15.8	19.2	14.7*	9.9	9.1*	Sulfur	8.7	11.5
General Mills Box J Choteau, MT 59422												
11-52-0	Choteau	1290	bulk	11	10.9	52	51.9					
16-20-0	Choteau	1291	bulk	16	16.2	20	20.6					
Gt. Plains Crop Box 115 Geraldine, MT 59446												
Blend/10-30-0	Geraldine	1294	bulk	10	16.0	30	30.0					
24-0-0	Geraldine	1295	bulk	24	24.6					Sulfur	6	6.3

COMMERCIAL FERTILIZER ANALYSIS

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
Gt. Salt Lake Mineral & Chem. Co. P.O. Box 1190 Ogden, UT 84402-1190												
0-0-52-18	Billings	2053	bulk					52	52.4	Sulfur	18	19.9
Greenfield Farmers Oil Co. Box 337 Fairfield, MT 59436												
20-20-13	Fairfield	1226	bulk	20	20.0	20	21.1	13	13.4			
Hardin Fertilizer Box 302 Hardin, MT 59034												
Blend/26.8-12.7-5	Hardin	1218	bulk	26.8	27.4	12.7	13.0	5.0	5.2			
Harvest States Box 138 Broadview, MT 59015												
Blend/15.3-20.28-9	Broadview	1201	bulk	15.3	15.2	39	39.1	9	9.4			
Harvest States Box 27 Winifred, MT 59489												
Blend/34.2-17.7-0	Winnifred	1211	bulk	34.2	35.6	17.7	16.8*					
Blend/12.5-31.3-6.2-6.2	Winnifred	1210	bulk	12.5	12.4	31.3	21.1*	6.2	14.5	Sulfur	6.2	9.0
Harvest States Box 355 Columbus, MT 59019												
Blend/13-33-10	Columbus	1377	bulk	13	15.8	33	35.4	10	10.0			
Hi Grade Fertilizer Fairview, MT 59221												
10-34-0	Fairview	442	bulk	10	9.5	34	32.8*	0				
10-34-0	Circle	448	bulk	10	9.9	34	34.0					

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN		P_2O_5		K_2O		MICRONUTRIENT	
				C	F	C	F	C	F	C	F
Hi-Line Fertilizer Box 228 Hingham, MT 59528											
10-34-0	Hingham	1263	bulk	10	9.6	34	33.9				
0-0-60	Hingham	1266	bulk					60	60.8		
46-0-0	Hingham	1268	bulk	46	46.4						
10-34-0	Kremlin	1271	bulk	10	9.9	34	34.5				
10-34-0	Great Falls	1282	bulk	10	9.3*	34	32.3*				
10-34-0	Conrad	1318	bulk	10	9.6	34	32.7*				
KF&G (Kalispell, Feed & Grain) Box 1075 Kalispell, MT 59901											
Suspension/9-30-0	Kalispell	1653	bulk	9	9.4	30	28.2*				
Kalium Chemical Co. 4 Executive Park Dr. NE, Suite 2211 Atlanta, GA 30329											
0-0-60	Chester	1252	bulk					60	62.6		
0-0-60	Belgrade	1670	bulk					60	62.7		
0-0-62	Dillon	1691	bulk					62	62.9		
0-0-60	Billings	2020	bulk					60	60.7		
0-0-60	Red Lodge	2024	bulk					60	60.7		
0-0-62	Worden	2026	bulk					62	63.1		
0-0-62	Conrad	1314	bulk					62	62.9		
0-0-60	Billings	2058	bulk					60	62.9		
0-0-60	Columbus	2078	bulk					60	62.7		
Laurel Co-op Box 7 Edgar, MT 59026											
Blend/19.8-15.9-15.7	Edgar	1380	bulk	19.8	18.7*	15.9	15.2	15.7	18.5		
L. P. Gas & F Fertilizer Box 1041 Denton, MT 59430											
Blend/28.1-28.1-0	Denton	1207	bulk	28.1	27.8	28.1	28.9				
Martrex, Inc. 14525 Hwy. #7, P.O. Box 1-G Minnetonka, MN 55343											
0-0-60	Bridger	2090	bulk					60	61.9		

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
Mon Kota Box 487 Fairview, MT 59221												
9-27-0	Fairview	443	bulk	9	8.5	27	26.6					
9-27-0	Fairview	1442	bulk	9	8.6	27	26.7					
9-27-0	Fairview	1458	bulk	9	8.9	27	27.8					
Montana Sulphur Box 31118 Billings, MT 59101												
0-0-0-90	Dillon	1025	bulk							Sulfur	90	90.0
Nash Fertilizer 1015 Third Avenue North Laurel, MT 59044												
18-46-0	Lambert	1426	bulk	18	16.7*	46	46.0					
New Life Co. Box 164 Grass Range, MT 59032												
	Grass Range	1208	bulk							Sulfur	7	10.5
										Calcium	19	20.3
										Iron	.15	.42
Plant Food Co-Op Box 1361 Billings, MT 59103												
Blend/31.6-7-0	Billings	1212	bulk	31.6	31.8	7	7.4	0	0			
Blend/27-20.2-0	Billings	1216	bulk	27	26.9	20.2	20.1					
Poly Phos Marketing, Inc. 2215 Bacon Road Grand Forks, ND 58201												
10-34-0	Fairview	1428	bulk	10	8.1*	34	34.1					
10-34-0	Flaxville	1429	bulk	10	7.6*	34	33.4					
Potash Company of Saskatchewan Saskatoon, Saskatchewan Canada												
PCS/0-0-60	Ryegate	503	bulk					60	63.9			
0-0-60	Fairfield	1225	bulk	0	0	0	0	60	63.5			
0-0-60	Great Falls	1231	bulk	0	0	0	0	60	63.8			

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
Selstad Soil Serv. RR 5045 Great Falls, MT 59401												
10-34-0	Conrad	1317	bulk	10	9.6	34	33.9					
Sherritt Fertlizer 12200 N. Jantzen Avenue, Suite 240 Portland, OR 97217												
32-0-0	Hingham	1264	bulk	32	31.2	0		0				
32-0-0	Kremlin	1270	bulk	32	31.6							
21-0-0-24	Kremlin	1272	bulk	21	20.9	0		0		Sulfur	24	24.5
21-0-0	Stevensville	1365	bulk	21	21.0					Sulfur	24	24.7
21-0-0-24	Edgar	2021	bulk	21	21.0					Sulfur	24	24.8
J. R. Simplot Co. P.O. Box 912 Pocatello, ID 83204												
11-52-0	Kalispell	24	bulk	11	11.1	52	52.2					
0-45-0	Belgrade	412	bulk			45	47.9					
16-20-0	Belgrade	414	bulk	16	15.9	20	20.7					
34-0-0	Glasgow	432	bulk	34	34.4							
28-0-0	Sidney	440	bulk	28	26.2*							
28-0-0	Fairview	441	bulk	28	28.0	0		0				
28-0-0	Circle	449	bulk	28	27.9	0		0				
12-0-0-26	Fairview	444	bulk	12	11.7	0		0		Sulfur	26	26.9
10-34-0	Three Forks	1014	bulk	10	11.3	34	33.6					
32-0-0	Three Forks	1015	bulk	32	31.8							
18-46-0	Billings	1215	bulk	18	18.2	46	46.0	0				
18-46-0	Great Falls	1220	bulk	18	17.1*	46	46.0					
18-46-0	Great Falls	1229	bulk	18	18.0	46	46.1					
11-52-0	Hingham	1265	bulk	11	11.1	52	52.2					
16-20-0-14	Hingham	1267	bulk	16	16.2	20	21.5			Sulfur	14	15.0
18-46-0	Hingham	1269	bulk	18	17.9	46	46.3					
16-20-0-14	Havre	1677	bulk	16	16.2	20	22.0			Sulfur	14	15.1
11-52-0	Fort Benton	1287	bulk	11	11.0	52	51.8					
11-52-0	Fort Benton	1293	bulk	11	11.2	52	52.2					
18-46-0	Conrad	1310	bulk	18	16.9*	46	46.7					
34-0-0	Conrad	1311	bulk	34	34.0							
34-0-0	Conrad	1312	bulk	34	34.4							
16-20-0	Great Falls	1323	bulk	16	15.9	20	19.9					
11-52-0	Great Falls	1324	bulk	11	11.0	52	53.1					

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
11-52-0	Stevensville	1353	bulk	11	11.0	52	52.2					
16-20-0	Stevensville	1354	bulk	16	16.1	20	19.8					
16-20-0	Stevensville	1367	bulk	16	16.2	20	20.7			Sulfur	14	15.1
28-0-0	Fairview	1427	bulk	28	28.0	0		0				
18-46-0	Fairview	1440	bulk	18	17.9	46	46.1					
28-0-0	Fairview	1441	bulk	28	28.1							
18-46-0	Ronan	1608	bulk	18	17.6	46	46.9					
0-45-0	Ronan	1657	bulk			45	45.3					
16-20-0	Dillon	1688	bulk	16	15.9	20	20.5					
11-52-0	Dillon	1689	bulk	11	11.0	52	53.3					
0-45-0	Dillon	1690	bulk			45	46.0					
0-52-0	Billings	2006	bulk	0		52	52.3	0				
11-52-0	Billings	2010	bulk	11	11.0	52	52.1					
11-51-0	Billings	2011	bulk	11	10.5	51	51.0					
10-34-0	Billings	2014	bulk	10	10.2	34	33.8					
11-52-0	Edgar	2022	bulk	11	11.3	52	51.3					
18-46-0	Hardin	2033	bulk	18	17.8	46	46.1					
0-45-0	Hardin	2034	bulk			45	44.9					
16-20-0	Hardin	2036	bulk	16	15.2*	20	20.8					
11-55-0	Billings	2061	bulk	11	11.1	55	52.4*					
18-46-0	Billings	2062	bulk	18	17.5	46	48.9					
16-20-0	Billings	2075	bulk	16	16.1	20	20.5					
16-20-0	Columbus	2079	bulk	16	16.2	20	20.2					
34-0-0	Columbus	2081	bulk	34	34.2							
11-52-0	Harlowton	2085	bulk	11	11.1	52	53.4					
16-20-0	Harlowton	2086	bulk	16	15.4	20	24.3					
J. R. Simplot Box 20363 Billings, MT 59104												
Blend/30.5-10.1-0	Billings	1373	bulk	30.5	30.7	10.1	10.3	0				
Texas Gulf Chemicals												
0-0-60	Moise	1655	bulk					60	61.9			
USS Agri-Chemicals 10 Ast S. Temple, Rm. 1250 Salt Lake City, UT 84111												
34-0-0	Big Timber	1378	bulk	34	34.2							
USS Steel/34-0-0	Billings	2060	bulk	34	34.4							

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
E. H. Walrath & Sons Box "P" Bridger, MT 59014												
Blend/28.8-8.2-4.1.....	Bridger	1375	bulk	28.8	29.0	8.2	7.7	4.1	4.4			
Blend/30.5-10.1-0.....	Bridger	1376	bulk	30.5	31.0	10.1	9.4	0				
Blend/22.3-15.6-11.1.....	Bridger	1379	bulk	22.3	19.4*	15.6	16.1	11.1	14.7			
Williams Feed Box 48 Sheridan, MT 59749												
Blend/25-10-0-7.5.....	Sheridan	1037	bulk	25	24.7	10	11.0	0		Sulfur	7.5	1.8
Blend/6.2-29.9-26.0-1.....	Dillon	1386	bulk	6.2	5.9	29.9	29.5	26.0	28.6	Sulfur	1	0.8
Westway Trading Corp. 6600 France Ave. South Minneapolis, MN 55435												
Wycon/12-0-0-26.....	Billings	2013	bulk	12	12.7					Sulfur	26	25.4
Wycon Chemical Company P.O. Box 1287 Cheyenne, WY 82003-1287												
Wycon/28-0-0.....	Billings	2012	bulk	28	28.5							
SPECIALITIES												
Chacon Chem. Corp. 2600 Yates Ave. City of Commerce, CA 90040												
Chacon Liquid Iron & Zinc & Chelate.....	Great Falls	1281	bag							Iron Zinc	1.75 [illegible]	1.72 [illegible]
Chevron Chemical Co. 940 Hensley Street Richmond, CA 94804												
Ortho/3-10-3.....	Stevensville	063	bag	3	3.1	10	12.3	3	3.0			
Orcho/12-0-0.....	Stevensville	1362	bag	12	14.4							
Ortho Fish Emul./5-1-1.....	Billings	2067	bag	5	5.2	1	1.6	1	1.5			

COMMERCIAL FERTILIZER ANALYSIS

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN		P_2O_5		K_2O		MICRONUTRIENT	
				C	F	C	F	C	F	C	F
Consumer Goods Int. Inc. Johathan Ind. Center Chaska, MN 55318 Greenaid all purpose house plant food	Billings	2072	bag	3	3.3	1	1.6	3	3.5		
Ross Daniels, Inc. Box 65430 West Des Moines, IA 50265 15-25-10	Bozeman	1044	bag	15	15.7	25	27.0	10	11.3		
Estech, Inc. 4060 East 26th Street Los Angeles, CA 90023 Super K-Gro/5-10-10	Great Falls	1232	bag	5	4.7	10	8.8*	10	13.5		
Super K-gro/4-8-8	Great Falls	1233	bag	4	4.7	8	8.2	8	9.1		
Holland Bulb Products Box 546 Sylacauga, AL 35150 Holland Brand Bulb Booster/9-9-6	Billings	2073	bag	9	7.1*	9	8.0*	6	8.3		
Howard Johnson Box 828, Railroad Avenue Viroqua, WI 54665 5-10-5	Belgrade	1041	bag	5	6.5	10	11.8	5	6.3		
Hyponex Co., Inc. 3489 Sawmill Road Copley, OH 44321 Hypostyx/10-5-5	Great Falls	1239	bag	10	12.2	5	5.5	5	6.3		
International Spike Inc. 817 E. Third St. Lexington, KY 40505 Jobes Plant Food Spikes 13-4-5	Billings	2064	bag	13	14.2	4	5.2	5	7.5		

COMMERCIAL FERTILIZER ANALYSIS

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
Knox Gelatine, Inc. 800 Sylvan Ave. Englewood Cliffs, NJ 07632												
Knox.....	Kalispell	1643	bag	15	16.4							
Leeming Div. Pfizer Inc. New York, NY 10017												
All purpose plant food/7-7-7.....	Billings	2070	bag	7	7.6	7	6.9	7	8.2			
Magnolia Products, Inc. 500 7th Avenue South Kirkland, WA 98033												
Malmo/16-20-0.....	Bozeman	1023	bag	16	15.9	20	20.4			Sulfur	9.5	10.4
Malmo/4-10-10.....	Bozeman	1024	bag	4	4.1	10	10.0	10	10.0	Iron	.60	2.0
Northrup King Co. Minneapolis, MN 55413												
Bone Meal/2-13-0.....	Billings	2074	bag	2	2.0	13	17.4					
18-24-6.....	Bozeman	1042	bag	18	18.0	24	24.4	6	7.2			
O. M. Scott & Sons Co. Marysville, OH 43041												
20-4-8.....	Bozeman	1043	bag	20	20.5	4	4.3	8	7.8	Sulfur	1	0.8
										Calcium	1	1.3
										Magnesium	.60	3.1
										Iron	.10	1.1
Peters Fertilizer Products WR Grace & Co Fogelsville, PA 18051												
Peters Plant Food/15-30-15..	Billings	2069	bag	15	16.2	30	31.4	15	17.4			
Plant Research Lab. 2525 Dupont Dr. Irvine, CA 92213												
Oxygen Plus/1-2-1.....	Billings	2071	bag	1	1.2	2	2.5	1	1.2			

COMMERCIAL FERTILIZER ANALYSIS

MANUFACTURER/DISTRIBUTOR BRAND/PRODUCT NAME	PLACE OF COLLECTION	SAMPLE NUMBER	BAG/ BULK	NITROGEN C	NITROGEN F	P_2O_5 C	P_2O_5 F	K_2O C	K_2O F	MICRONUTRIENT	MICRONUTRIENT C	MICRONUTRIENT F
Rapid-Gro Corp. Dansville, NY 14437												
Rapid-Gro/30-12-11.....	Billings	2066	bag	30	31.1	12	13.1	11	11.2			
Schultz Co. St. Louis, MO 63043												
Schultz Ins. Liquid/ Plant Feed/10-15-10.....	Billings	2068	bag	10	10.8	15	16.4	10	11.7			
Sterns Nurseries Inc. Geneva, NY 14456												
Miracle-Gro/18-18-21.....	Billings	2063	bag	18	18.2	18	19.0	21	21.9			
The Charles H. Lilly Co. 7737 NE Killingworth Portland, OR 97218												
Lilly Miller/5-3-1.....	Kalispell	1640	bag	5	8.2	3	2.7	1	1.5	Calcium	2	5.1
Booster/5-25-25.....	Kalispell	1642	bag	5	7.5	25	22.0*	25	29.4	Magnesium	.05	.004*
										Zinc	.15	003*
										Iron	.15	.008*
										PP	.05	.002

1984 FERTILIZER ANALYSIS BREAKDOWN

COMMERCIAL NUTRIENT	NO. ANALYZED	NO. DEFICIENT	% DEFICIENT
Nitrogen	304	29	9.5
P_2O_5	228	28	12.3
K_2O	71	7	9.9
Sulfur	43	3	7.0
Zinc	3	1	—
Iron	3	0	—
Magnesium	3	0	—
Calcium	1	0	—

FERTILIZER SAMPLING

YEAR	NO. SAMPLES TAKEN	NO. SAMPLES DEFICIENT	DEFICIENT
1977	448	32	7.1
1978	533	30	5.6
1979	365	21	5.7
1980	506	27	5.3
1981	428	24	5.1
1982	607	41	6.7
1983	558	50	8.9
1984	379	58	15.3

SPECIALTY NUTRIENT	NO. ANALYZED	NO. DEFICIENT	% DEFICIENT
Nitrogen	25	1	4
P_2O_5	23	3	13
K_2O	21	0	0
Sulfur	2	0	—
Iron	2	1	—
Magnesium	2	1	—
Zinc	1	1	—
Calcium	1	0	—
Copper	1	0	—

FERTILIZER TONNAGE

YEAR	TONNAGE
1972	226,939
1973	268,061
1974	219,197
1975	170,324
1976	283,925
1977	259,211
1978	301,487
1979	324,838
1980	295,958
1981	363,295
1982	384,387
1983	447,407
1984	406,567

FERTILIZER AND FERTILIZER MATERIAL SOLD IN MONTANA
By Crop Reporting Districts
January - June 1984

	NORTH WEST	NORTH CENTRAL	NORTH EAST	CENTRAL	SOUTH WEST	SOUTH CENTRAL	SOUTH EAST	OUT OF STATE
Anhydrous Ammonia	527	13,246	1,028	8,118	462	1,545	211	58
Ammonium Nitrate	4,022	21,709	2,103	12,858	9,141	10,767	1,721	99
Ammonium Sulfate	2,939	2,378	291	1,072	1,331	580	173	25
Ammonium Thiosulfate	125	908	157	614	231	3	29	37
Urea	722	14,443	2,575	6,499	1,445	3,059	577	330
Nitrogen Solutions	294	2,657	1,989	1,840	1,457	3,375	300	554
0-44-0, 0-45-0	403	205	81	100	788	603	278	0
Phosphoric Acid	12	565	0	4	0	7	0	102
Potash	1,626	4,197	682	2,706	1,485	1,629	685	143
Compost	0	0	12	0	0	0	0	0
Gypsum, Lime & Sulfur	162	1,309	361	56	95	739	56	398
Micronutrient Materials	9	106	45	323	39	143	30	251
18-46-0	959	10,319	7,934	3,931	1,451	5,441	2,222	0
16-20-0	3,399	1,602	134	1,933	3,407	1,760	235	0
11-48-0 — 11-55-0	995	24,596	2,704	11,724	3,546	1,552	568	110
30-10-0	0	340	79	78	7	456	2	0
10-34-0	47	3,850	581	1,395	103	18	0	844
2-1-0 ratios i.e. 27-14-0	1,053	69	78	1,528	127	417	10	0
1-1-0 ratios i.e. 23-23-0	15	227	498	752	5	458	6	0
1-1-1 ratios i.e. 16-16-16	574	0	21	654	0	340	9	9
Misc. Custom Blends, i.e.								
25-10-0, 20-10-10, 25-12-10	204	752	75	95	0	653	2	92
20-0-10, 15-0-12, 26-4-7	73	141	0	25	0	92	4	0
4-35-3, 8-10-4, 17-26-0	186	197	1,143	55	10	610	162	237
3-0-12, 8-6-10, 20-15-30	21	0	18	6	0	132	0	0
0-22-22, 6-27-13, 8-25-17	11	78	130	125	8	402	24	1
5-17-19, 0-19-25, 10-20-30	87	33	0	154	0	32	0	0
Misc. Spec. Fert.,	0	0	0	0	0	0	0	859
	18,465	103,927	22,719	56,645	25,138	34,813	7,304	4,149

FERTILIZER AND FERTILIZER MATERIAL SOLD IN MONTANA
By Crop Reporting Districts
July-December 1984 Year

	NORTH WEST	NORTH CENTRAL	NORTH EAST	CENTRAL	SOUTH WEST	SOUTH CENTRAL	SOUTH EAST	OUT OF STATE
Anhydrous Ammonia	64	9,779	396	7,705	406	1,979	252	94
Ammonium Nitrate	599	3,520	855	6,065	1,242	4,247	254	1,214
Ammonium Sulfate	258	881	156	212	410	183	31	75
Ammonium Thiosulfate	0	677	33	201	93	0	164	0
Urea	87	3,826	857	3,260	499	1,307	166	32
Nitrogen Solutions	223	3,628	970	821	235	687	234	132
0-44-0, 0-45-0	71	135	243	23	381	316	72	0
Phosphoric Acid	0	393	0	0	8	19	0	0
Potash	371	1,820	569	1,108	629	558	300	51
Compost	140	45	0	0	0	0	0	0
Gypsum, Lime & Sulfur	43	64	26	289	13	371	43	2
Micronutrient Materials	10	112	14	8	19	45	1	0
18-46-0	205	4,674	5,521	2,537	575	3,240	1,975	0
16-20-0	484	546	3	762	1,148	527	93	0
11-48-0 — 11-55-0	424	14,887	2,398	10,301	1,164	3,020	427	76
30-10-0	34	16	0	0	0	0	4	0
10-34-0	27	3,123	167	627	0	17	0	0
2-1-0 ratios i.e. 27-14-0	79	32	20	29	1,268	12	9	0
1-1-0 ratios i.e. 23-23-0	0	49	131	51	200	9	9	0
1-1-1 ratios i.e. 16-16-16	174	3	1	1	0	33	4	0
Misc. Custom Blends, i.e. 25-10-0, 20-10-10, 25-12-20	299	254	28	111	12	136	41	6
20-0-10, 15-0-12, 26-4-7	22	75	20	237	5	38		
4-35-3, 8-10-4, 17-26-0	12	497	835	80	9	365	153	5
3-0-12, 8-6-10, 20-15-30	54	64	8	365	46	136		
0-22-22, 6-27-13, 8-25-17	59	182	35	94	0	20		
5-17-19, 0-19-25, 10-20-30	28	75	281	0	40	65		
Misc. Spec. Fert.,	0	0	0	0	0	0	0	188
	3,767	49,347	13,567	34,887	8,402	17,330	4,232	1,875

MONTANA DEPARTMENT OF AGRICULTURE

SUMMARY OF FERTILIZER AND FERTILIZER MATERIAL SOLD IN MONTANA

FOR YEAR OF 1984

		TONS		
		January-June	July-December	TOTAL
	Materials			
1.	Anhydrous Ammonia	25,195	20,675	45,870
2.	Ammonium Nitrate	62,420	17,996	80,416
3.	Ammonium Sulfate	8,789	2,206	10,995
4.	Ammonium Thiosulfate	2,104	1,168	3,272
5.	Urea	29,650	10,034	39,684
6.	Nitrogen Solutions	12,466	6,930	19,396
7.	0-44-0, 0-45-0	2,458	1,241	3,699
8.	Phosphoric Acid	690	420	1,110
9.	Potash	13,153	5,406	18,559
10.	Compost	12	185	197
11.	Gypsum, Lime & Sulfur	3,176	851	4,027
12.	Micronutrient Materials	946	209	1,115
	Ammoniated Phosphates & Mixtures			
13.	18-46-0	32,257	18,727	50,984
14.	16-20-0	12,470	3,563	16,033
15.	11-48-0 — 11-55-0	45,795	32,697	78,492
16.	30-10-0	962	54	1,016
17.	10-34-0	6,838	3,961	10,799
18.	2-1-0 ratios i.e. 27-14-0	3,282	1,439	4,721
19.	1-1-0 ratios i.e. 23-23-0	1,961	449	2,410
20.	1-1-1 ratios i.e. 16-16-16	1,607	216	1,823
	Misc. Custom Blends. i.e.			
21.	25-10-0, 20-10-10, 25-12-10	1,873	887	2,760
22.	20-0-10, 15-0-12, 26-4-7	335	397	732
23.	4-35-3, 8-10-4, 17-26-0	2,600	1,956	4,556
24.	3-0-12, 8-6-10, 20-15-30	177	673	850
25.	0-22-22, 6-27-13, 8-25-17	779	390	1,169
26.	5-17-19, 0-19-25, 10-20-30	306	489	795
	Misc. Spec. Fert.,	859	188	1,047
	TOTAL	273,160	133,407	406,567
	Total Nitrogen	76,271	39,178	115,449
	Total P_2O_5	42,348	29,999	72,347
	Total K_2O	8,445	3,522	11,967

MONTANA DEPARTMENT OF AGRICULTURE
PLANT INDUSTRY DIVISION
AGRICULTURE/LIVESTOCK BLDG.
CAPITOL STATION
HELENA, MT 59620

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